



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,467	05/15/2006	Shunsuke Shutou	062096	7024
38834 7590 01/25/2010 WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036				
EXAMINER CHANG, CHARLES S				
ART UNIT 2883		PAPER NUMBER		
NOTIFICATION DATE 01/25/2010		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

Office Action Summary

Application No.

10/579,467

Applicant(s)

SHUTOU, SHUNSUKE

Examiner

CHARLES CHANG

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2, 3 and 5-32 is/are pending in the application.
- 4a) Of the above claim(s) 6-20 and 23-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2, 3, 5, 21, 22, 31 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ ~~Notice of Informal Patent Application~~
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 6-16, 19-20, 23, and 26-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on June 16, 2008.
2. Applicant's election without traverse of claims 1-5, 17-18, 21-22, and 24-25 in the reply filed on June 16, 2008 is acknowledged.
3. During a telephone conversation with Nicolas Seckel on July 16, 2008, a provisional election was made without traverse to prosecute the invention of Group I Species A, claims 1-5, 21-24. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-20, 25-30 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Information Disclosure Statement

4. The information disclosure statement filed May 15, 2006 (JP 9-222605, WO 03/091767, JP 11-72621) and August 15, 2006 (JP 2631015, JP 2000-511296, JP 8-511812, JP 10-508048, JP 2001-343529) fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 2, 5, 21-22, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Schadt et al. (US 20020180916) hereinafter Schadt '916.

Regarding claim 21, Schadt '916 discloses an optical film (combination of 1 and 2) comprising a retardation film, showing birefringence, wherein the said retardation film comprises a non-liquid crystal polymer (2), the non-liquid crystal polymer is aligned, alignment of the non-liquid crystal polymer on at least one of surfaces of the retardation film is different from alignment of the non-liquid crystal polymer on an inside of the retardation film, and the surface having the alignment that is different from the alignment on the inside functions as an alignment surface, the non-liquid crystal polymer contains at least one polymer selected from the group consisting of polyamide, polyimide, polyester, polyetherketone, polyaryletherketone, polyamideimide and polyesterimide, and the non-liquid crystal polymer is a polymer that is coated to a base (1) and, when dried generates anisotropy wherein the optical film is free of an alignment film other than the non-liquid crystal polymer, the optical film is free of an alignment film other than the non-liquid crystal polymer (Fig. 1; sections 0036-0039, 0059-0061).

Regarding claim 2, Schadt '916 discloses an optical film, the retardation film having a function as an alignment film (sections 0036-0039).

Regarding claim 5, Schadt '916 discloses an optical film, wherein the non-liquid crystal polymer is a polymer of a liquid crystal compound (sections 0036-0039).

Regarding claim 22, Schadt '916 discloses an optical film, further comprising a polarizing element (Fig. 7; section 0071).

Regarding claim 31, Schadt '916 discloses an optical film, wherein the at least one of the surfaces of the retardation film is formed by irradiation with ultraviolet light (sections 0036-0039).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schadt '916 in view of Murayama et al. (US 6778242).

Regarding claim 3, Schadt '916 does not necessarily disclose an optical film, wherein optical characteristics of the retardation film show any of formulae (I) to (III) below, $n_x = n_y > n_z$ (I) $n_x > n_y > n_z$ (II) $n_x > n_y = n_z$ (III), where, in the above formulae (I) to (III), n_x , n_y and n_z respectively indicate refractive indices in an X-axis direction, a Y-axis direction and a Z-axis direction in the retardation film, the X-axis corresponds to an axial direction exhibiting a maximum refractive index within a plane of the retardation film, the Y-axis corresponds to an axial direction perpendicular to the X-axis within the plane, and the Z-axis corresponds to a thickness direction perpendicular to the X-axis and the Y-axis. Murayama discloses an optical

film, wherein optical characteristics of the retardation film show any of formulae (I) to (III) below, $n_x = n_y > n_z$ (I) $n_x > n_y > n_z$ (II) $n_x > n_y = n_z$ (III), where, in the above formulae (I) to (III), n_x , n_y and n_z respectively indicate refractive indices in an X-axis direction, a Y-axis direction and a Z-axis direction in the retardation film, the X-axis corresponds to an axial direction exhibiting a maximum refractive index within a plane of the retardation film, the Y-axis corresponds to an axial direction perpendicular to the X-axis within the plane, and the Z-axis corresponds to a thickness direction perpendicular to the X-axis and the Y-axis (Fig. 5). The particular characteristics is demonstrated in the prior art and is applicable to an optical film. The particular characteristics constitute common characteristics and falls within the bounds of Schadt '916. It would have been obvious at the time of the invention to one of ordinary skill in the art to use the teachings of Murayama to enhance the viewing quality by controlling the light passing through the display.

9. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schadt '916 in view of Schadt et al. (US 6734936) hereinafter Schadt '936.

Regarding claim 32, Schadt '916 does not necessarily disclose an optical film, wherein the at least one surface of the retardation film has a refractive index smaller in a polarization direction than a refractive index in a direction 90° with respect to the polarization direction. Schadt '936 teaches an optical film, wherein the at least one surface of the retardation film has a refractive index smaller in a polarization direction than a refractive index in a direction 90° with respect to the polarization direction (col. 13 lines 23-31). The particular characteristics is demonstrated in the prior art and is applicable to an optical film. The particular characteristics constitute common characteristics and falls within the bounds of Schadt '916. It would have been

obvious at the time of the invention to one of ordinary skill in the art to use the teachings of Schadt '936 to enhance the dependence on viewing angle.

Response to Arguments

10. Applicant's arguments filed October 13, 2009 have been fully considered but they are not persuasive. The applicant argues Schadt '916 fails to provide that the optical film is free of an alignment film other than the non-liquid crystal polymer. This is not persuasive. The applicant states that LCP layer 3 is "adjacent another orienting layer which as before, is either a PPN layer or a conventional orienting layer" as stated in paragraph 0041. However, the examiner considers the optical film comprising the non-liquid crystal polymer (2) and the base (1) as stated above. Therefore, the optical film is free of an alignment film other than the non-liquid crystal polymer and thus applicant's argument is not persuasive.

11. Applicant's cancellation of claim 4 in the reply filed October 21, 2008 is acknowledged. Applicant's cancellation of claim 1 in the reply filed May 4, 2009 is acknowledged.

12. Applicant's withdrawal of claims 6 and 23 in the reply filed on June 16, 2008 was acknowledged. Claims 24-25 depend on claim 23. Therefore, claims 24-25 are withdrawn. Applicant's withdrawal of claims 17-18 in the reply filed on May 4, 2009 is acknowledged.

13. Applicant's addition of claim 31 in the reply filed October 21, 2008 is acknowledged. Applicant's addition of claim 32 in the reply filed May 4, 2009 is acknowledged.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schadt et al. (US 6608661) exhibits similar structure features as disclosed by the invention of the applicant.

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES CHANG whose telephone number is (571)270-5024. The examiner can normally be reached on Mon-Fri 9:00 A.M. - 5:00 P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571)272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles Chang/
Patent Examiner, Art Unit 2883

/Frank G Font/
Supervisory Patent Examiner, Art Unit 2883